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The authors discuss the development, administration, and results of a job inventory for the position of field wireman. This job analysis was conducted as a step in the systems engineering of a course of instruction for the job. The questionnaire itself and tables displaying survey results are presented as appendices.					

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## Staff Paper

FIELD WIREMAN TASK PERFORMANCE INVENTORY

by Jacklyn Hungerland Morris Showel

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February 1969

HumRRO Division No. 3 (Recruit Training)

The George Wathington University HUMAN RESOURCES RESEARCH OFFICE Operating under contract with THE DEPARTMENT OF THE ARMY



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#### PREFATORY NOTE

This Staff Paper provides the content and results of a job analysis survey conducted by the staff of Work Unit APSTRAT. The overall research objective of Work Unit APSTRAT is to develop and test, in an operational setting, instructional systems appropriate for multi-aptitude populations. One of the specific MOSs chosen as a vehicle for this study is that of the Field Wireman, MOS 36K. The job analysis was conducted as a step in the systems engineering of the course.

A review of the course had been conducted previously under Work Unit SPECTRUM. That review indicated that the Field Wireman Course would lend itself well to the planned research, in that (a) its requirements are composed of several levels of motor skills as well as a certain, but minimal, degree of cognitive skill; (b) it is a high density course; and (c) the range of trainee aptitude is fairly broad. Since there were no plans for system engineering of the course by the Southeastern Signal School, no duplication of research efforts was expected.

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#### **BACKGROUND**

Although APSTRAT is primarily concerned with training strategies rather than content, it seemed reasonable at the outset to try to utilize relevant content. Thus the on-the-job survey. Discussions with several NCOs at the Field Wireman Course at Fort Ord had clearly indicated that there were several varied concepts of what the Field Wireman actually did on the job. There was also a strong indication that some portions of the present training might not be necessary in connection with the wireman's job performance (i.e., cryptography).

As more such informal information became available, it appeared that in the process of developing an experimental course to examine training strategies, the research effort might well encompass a system engineering approach as a secondary effort.

#### JOB QUESTIONNAIRE

As a first step in this direction, a "Field Wireman Task Performance Inventory" questionnaire was developed and administered to Field Wireman incumbents at Fort Hood, Texas in September 1968. Of the 298 incumbents who completed the questionnaire, 138 were returnees from Vietnam, Europe, Korea, and Thailand.\* A copy of the questionnaire is included as Appendix A.

The purpose of the questionnaire was to ascertain just what a Field Wireman actually does when he is on the job in the field. In addition to some biographical information, incumbents were asked to indicate the approximate number of days on which they performed each of 214 job duties. Estimates were to be based on their last 30 days on the job while they were in the field.

The job duties, or questionnaire items, were derived from the objectives set forth in the Field Wireman Army Subject Schedule and the course lesson plans, and from discussions of wiremen's duties held between research personnel and the staff of the Field Wireman Course at Fort Ord, California. In addition to the Field Wireman duties included as questionnaire items, several items were included (Items #182 through 229) which pertained to Linemen's duties (MOS 36C). These items were included because the discussions with instructors had led us to believe that wiremen did perform many lineman duties when they were in the field, and that linemen and wiremen were often used interchangeably.

The remaining 160 wiremen had never served overseas, but were assigned in the MOS stateside. Since this portion of the sample was non-representative (the men were newly graduated from Field Wireman Courses and had not as yet been assigned to duty positions in the MOS), these responses have been eliminated from the resume presented here.

In addition to the incumbents, 44 supervisors of Field Wiremen (MOS 36K40 or 31G40) completed a similar questionnaire. The supervisors were asked to indicate approximately the number of days on which wiremen under their supervision performed each of the 214 job duries during the last 30 days that the supervisor was on the job in the field. A copy of the instructions to the supervisors for completing their questionnaires is included as Appendix B.

At the time the questionnaire was administered, the verbal instructions and guidance given to the subjects repeatedly stressed the fact that we wanted them to report on the last month they were actually out on their normal job in the field. This last month on the job may not have been the last month that the man was overseas—he may have been pulled back to a rear area where he did not work in his norma' duty position However, since we did not feel that it was reasonable to ask a man to recall precisely what he did on the job six or eight months previously we simply made an effort to have them clearly understand the time period on which we were asking them to report

Following the administration of the questionnaire, returnees from overseas were asked to stay on for a few minutes. The administrators then held informal group discussions with these men asking their opinions on what they felt they could have used more training in to better prepare them to do their jobs in the field. They were also asked what subjects, if any, they felt might be diminished or dropped from the Field Wireman Course.

There was also space provided on the back of the answer sheet where the men were asked to list any job duties they performed regularly in addition to or instead of those presented on the questionnaire

#### **RESULTS**

A compilation and resume of responses to the inventories appear in Appendices C(incumbents) and D(supervisors). The primary findings are as follows:

- 1. Only 22 out of a possible total of 214 distance job duties were done by more than half of the men surveyed at least once
- 2. The 22 job duties cover very basic wireman skills, but it is estimated that training for these particular skills amounts to about 55 of the 352 hours presently devoted to preparing Field Wiremen
- 3. Of the job duties not performed by 90 percent of the men sur/eyed, many are drawn from large instructional blocks (Message Center Operations, Telephone Switchboard Operation, Field Wire Techniques and Cryptography)
- 4. The most frequent job performed by Field Wiremen is "Driving Light Vehicles (up to 3/4 ton)." This was the only item which more than 75 percent of the sample indicated they had performed

- 5. Virtually no lineman duties which were included in the inventory were ever performed by Field Wiremen.
- 6. The supervisors tended to report their men as doing more jobs more often than the men reported.
- 7. The incumbents from overseas who were interviewed indicated that more training was needed in: radio operation and procedure; field wire techniques; switchboard SB-22; and pole climbing. They also felt that use of field expedients should be stressed in training.
- 8. The supervisors who were interviewed suggested more training in the newer series radios (AN/VRC-46, AN/GRC-160, and AN/PRC-77), completion of communication records and forms, and pole climbing (to develop confidence).
- 9. A number of various additional tasks were reported as having been done by returnees. Most of these tasks were related to operation of the newer series radios. A complete tabulation of these responses is included as Appendix E.

#### COMMENT AND DISCUSSION

Although this survey dealt with a relatively small sample of men, the results do reliably indicate that a fairly large discrepancy exists between on-the-job activity and existing training content. If the findings are considered acceptable, a choice is presented between developing a training program based on just those activities used in the field or to proceed with curriculum revision while accepting the training-job activity discrepancy Although the first choice would appreciably cut down training time and reduce recycling and failures, it does not appear warranted at the present time Thus, APSTRAT will design the Field Wireman curriculum according to existing training requirements instead of the job analysis findings.

#### APPENDIX A

#### FIELD WIREMAN TASK PERFORMANCE INVENTORY

(Questionnaire)

The purpose of this questionnaire is to find out how often you did certain kinds of jobs in your 36K2O duty position during your last 30 duty days in the field. We have listed tasks normally performed by Field Wiremen. We would like you to help us by telling us what tasks you did on the job and about how many duty days you did those task in that one month's time. It is important that you indicate the number of duty days on which you actually did the task.

We are just as interested in what jobs you have not done very often as we are in those you have done frequently. Take your time and give your answers as nearly as possible to the actual number of duty days you did a job.

Your answers will be confidential and will not appear on your record.

This questionnaire is for research purposes only. The answers you give will be used only to help in making possible changes to improve the training program in your MOS. Remember, your answers will not be graded. We only want your help in improving one of the U.S. Army's training courses.

DO NOT WRITE IN THIS BOOKLET. MARK YOUR ANSWERS

ON THE SHEET PROVIDED.

APSTRAT August 1968

- 16. Drove light vehicles (up to 3/4 ton)
- 17. Performed first echelon maintenance on light vehicles
- 18. Drove 2½ ton truck
- 19. Drove 5 ton truck
- 20. Filled-in DD Form 1150 (Request for Issue or Turn-in) when requesting or returning equipment
- 21. Filled-in DA Form 2402 (Exchange Tag) when exchanging equipment
- 22. Filled-in DD Form 314 (Preventive Maintenance Schedule and Record) to indicate the serviceability of equipment
- 23. Filled-in DA Form 2404 (Equipment Inspection and Maintenance Worksheet) to indicate the serviceability of equipment
- 24. Made entries on DA Form 2151R (Message Center Log)
- 25. Made entries on DA Form 11-37 (Distribution Center Delivery List)
- 26. Prepared DA Form 11-63 (Route Delivery List)
- 27. Made entries on DA Form 173 (Joint Message Form)
- 28. Made entries on DA Form 11-53 (Operator's Number Sheet/Station Log)
- 29. Made entries on DA Form 2408-3 (Equipment Maintenance Record)
- 30. Filled-in DA Form 2408-14 (Uncorrected Fault Record)
- 31. Filled-in DA Form 2406 (Equipment Profile)
- 32. Made entries on DA Form 2409 (Organizational Maintenance Record)
- 33. Filled-in DA Form 11-170 (Message Form)

#### Used the following from the SOI:

- 34. Air Messenger Schedule
- 35. Motor Messenger Schedule
- 36. Tel or Ratel Authentication System
- 37. Other Authentication Systems
- 38, TT. RATT and RATG Authentication System
- 39. Maplay Cryptosystem

- 40. Operations Code
- 41. Prearranged Message Code
- 42. Friendly Nuclear Strike Warning System
- 43. Message Reference Number System
- 44. Numeral Code
- 45. Radio Call Signs and Frequencies
- 46. Teletypewriter Call Signs
- 47. Communication Designators
- 48. Telephone Directory
- 49. Wire Tagging Code
- 50. Sound Signals
- 51. Panel Code
- 52. Unit Identification Code
- 53 Emergency Ground/Air Code and Panel Code
- 54. Pyrotechnic and Smoke Signals
- 55. Printed or pronounced call-signs
- 56. Printed or pronounced PRO words
- 57. Printed or pronounced letters phonetically (phonetic alphabet)
- 58. Pronounced numbers phonetically when using voice communication equipment
- 59. Printed block letters when copying messages
- 60. Printed Ø when copying the number zero in messages
- 61. Converted date and time to date/time/zone group
- 62. Converted local time to ZULU time
- 63. Processed incoming messages
- 64. Prepared outgoing messages
- 65. Processed outgoing messages

- 66. Authenticated radio stations and radio messages
- 67. Used Route Bulletin to determine direct and alternate routes to other switchboards
- 68. Used Allied Communications Procedure [ACP 134(a)] for authorized telephone-switchboard operating procedures
- 69. Filled in Designator Strips for switchboard operation
- 70. Prepared and used Traffic Diagram for switchboard operation

#### Performed preventive maintenance on:

- 71. Pole climbing equipment
- 72. Wire laying/recovery equipment
- 73. SB-86 switchboard
- 74. SB-22 switchboard
- 75. SB-993 switchboard
- 76. TA-312 telephone
- 77. TA-264 telephone
- 78. TA-1 telephone
- 79. AN/PRC/10 radio
- 80. AN/PRC/25 radio
- 81. Administered first aid for electrical shock
- 82. Administered first aid for broken bones
- 83. Administered first aid for burns
- 84. Administered first aid for splinters
- 85. Administered first aid for unconsciousness
- 86. Administered first aid for cuts and bruises
- 87. Related map features to ground features
- 88. Interpreted map symbols
- 89. Moved by "dead reckoning"
- 90. Navigated across unfamiliar terrain

- 91. Used cover and concealment to avoid detection by the enemy
- 92. Used your weapon to defend yourself from enemy attack
- 93. Selected route along which field wire was to be layed
- 94. Prepared line route maps
- 95. Interpreted line route maps
- 96. Made entries on Wire Tags and fastened tags to field wire lines
- 97. Interpreted entries on Wire Tags
- 98. Handled classified material
- 99. Prepared circuit diagrams
- 100. Interpreted circuit diagrams
- 101. Selected type of construction (aerial, ground, underground) to be used in a particular situation
- 102. Selected site for and installed Construction Centers
- 103. Selected sites for and installed Test Stations
- 104. Decided on and used the field wire tie appropriate to use in a particular situation (clove hitch, knob tie, basket hitch, etc.)
- 105. Erected Lance Poles
- 106. Installed field wire on the surface of the ground
- 107. Installed field wire across roads by laddering the wire
- 108. Installed field wire across roads and railroads using culverts
- 109. Installed field wire across roads using trenches
- 110. Installed overhead field wire for short spans
- 111. Installed overhead field wire for long spans
- 112. Installed field wire below the surface of streams and rivers
- 113. Installed field wire under railroad tracks by passing wire between ties
- 114. Installed CX-162/G or CX-163/G (Five Pair Cable) in areas where field wire lines were congested
- 115. Prepared safety equipment for pole climbing

- 116. Ascended and descended pole using safety equipment
- 117. Performed normal wireman duties, using wireman tools and equipment while on pole
- 118. Installed simplex circuits
- 119. Installed phantom circuits
- 120. Installed simplex-phantom circuits
- 121. Detected the presence and general location of faults in field wire lines using a field telephone (shorts, grounds, crossed, open circuits)
- 122. Determined the specific location of faults in field wire lines by visual inspection
- 123. Corrected faults in field wire lines
- 124. Inspected recovered wire for abrasions or breaks and serviced wire as necessary
- 125. Decided the splicing technique to use in a particular situation
- 126. Spliced field wire (WD-1) using the TL-582/U (crimper)
- 127. Spliced field wire (WD-1) using wire cutting pliers
- 128. Made standard splice
- 129. Made T splice in field wire (WD-1)
- 130. Tested recovered wire for open circuits, short circuits, or high loop resistance
- 131. Tagged reel of serviced and tested recovered field wire
- 132. Used MX-306/G to lay field wire (One man: canvas doughnut type)
- 133. Used Spool DR-8 and Wire Dispenser CE-11 (Ome man: Harness type) to lay and recover field wire
- 134. Used Reel 159/U and Wire Dispenser RL-27B (Two men: Axel type) to lay and recover field wire
- 135. Used Reel RL-159/U and Wire Dispenser RL-31E (Two men: A-frame type) to lay and recover field wire
- 136. Used Reel RL-159/U and Wire Dispenser RL-172/G (One man: manual or motor) to lay and recover field wire
- 137. Checked component parts and prepared SB-22 for operation

- 138. Connected headset to SB-22
- 139. Connected two SB-22s together
- 140. Operated the SB-22 to complete required calls
- 141. Corrected common equipment malfunctions in the SB-22
- 142. Broke down SB-22 for movement or storage
- 143. Checked component parts and prepared SB-86 for operation
- 144. Connected headset to SB-86
- 145. Connected SB-86 for teletypewriter service
- 146. Operated SB-86 to complete required calls
- 147. Corrected common equipment malfunctions in the SB-86
- 148. Broke down SB-86 for movement or storage
- 149. Checked component parts and prepared SB-993 for operation
- 150. Operated SB-993 to complete required calls
- 151. Broke down SB-993 for movement or storage
- 152. Assembled components of AN PRC/10 radio
- 153. Calibrated the AN PRC/10 equipment and checked for transmission and reception
- 154. Operated the AN PRC/10
- 155. Broke down the AN PRC/10
- 156. Assembled components of AN PRC/25 radio
- 157. Set BAND switch and adjusted tuning controls on AN PRC/25
- 158. Checked AN PRC/25 radio for transmission and reception
- 159. Installed re-transmission cable MK-126
- 160. Operated the AN PRC/25
- 161. Broke down the AN PRC/25
- 162. Prepared TA-1 telephone for operation
- 163. Operated TA-1 telephone
- 164. Broke down TA-1 telephone

- 165. Prepared TA-264 telephone for operation
- 166. Operated TA-264 telephone
- 167. Broke down TA-264 telephone
- 168. Prepared TA-312 telephone for operation
- 169. Operated TA-312 telephone with batteries
- 170. Operated TA-312 telephone without batteries
- 171. Broke down TA-312 telephone
- 172. Installed antenna RC-292
- 173. Operated the RT-524 component of the AN/VRC-12 series radio
- 174. Pitched tents for use as part of communications center
- 175. Operated and serviced power generators
- 176. Installed and operated switchboard MTC-7
- 177. Used cryptographic equipment to encode or decode messages
- 178. Prepared messages for transmission on manual teletype
- 179. Extracted, duplicated, and distributed pertinent sections of SOI and SSI to subordinate units
- 180. Routed messages on the basis of their content (subject matter) to staff sections
- 181. Used Technical Manuals as necessary
- 182. Surveyed and staked out a pole line
- 183. Cleared "right of way" (path) for pole line
- 184. Operated V-18/MTQ to dig holes for poles
- 185. Dug holes for poles using hand tools
- 186. Operated V-17/MTQ to set poles in holes
- 187. Set poles in holes using hand tools (pike or gin pole)
- 188. Used a Guy Rule to determine size of guy
- 189. Installed guys, braces and anchors to support poles
- 190. Installed Cross-arms on poles

- 191. Used Pull Finder and Steel Tape to measure pull on poles and angles
- 192. Loaded or unloaded poles from V-120/GT or V-13/GT Trailer
- 193. Loaded or unloaded reels of cable from V-120/GT or V-13/GT Trailer
- 194. Used lineman's hand signals
- 195. Tied one or more of the following knots or hitches: bowline, bowline on a bight, sheep shank, clove hitch, square knot, timber hitch, half hitch
- 196. Made a "crown splice" or "eye splice" in rope
- 197. Installed Transposition Brackets
- 198. Erected A-Frames to support communication wire and cable
- 199. Installed hardware (Thru bolt, Thimble eye, etc.) on pole and cross-arms
- 200. Installed Field Wire WD-1 on poles
- 201. Installed Spiral Four (S-4) cable on poles
- 202. Installed Telephone Repeater AN/TCC-11 on pole
- 203. Used Test Set TS/712/TCC-11 to check out Telephone Repeater
- 204. Installed 5 pair cable on poles
- 205. Installed 26 pair cable on poles
- 206. Installed Distribution Box J-1077A/U on pole
- 207. Used Cable Plow LC-236 to adjust tension on cable
- 208. Installed Cable Tension Bridge on cable
- 209. Spliced Spiral Four (S-4) cable
- 210. Spliced 5 pair cable
- 211. Installed suspension strands on poles to support cable
- 212. Installed plastic sheathed cable (Figure 8, Alpeth, Stalpeth, or PICA) on poles or cross-arms
- 213. Installed lead sheathed cable on poles or cross-arms
- 214. Operated Cable Lashing Machine
- 215. Installed cable terminal on pole
- 216. Installed drop wire from cable terminal to house

- 217. Installed protectors and ground wire for telephone
- 218. Installed wire for inside house run for telephone
- 219. Installed connector blocks for telephone
- 220. Installed telephone (TA-236, TA-312, or TA-43)
- 221. Installed auxiliary telephone equipment (key equipment, buzzers, etc.)
- 222. Installed and operated Communication Patching Panel SB-611/MRC or SB-675/MRC
- 223. Operated Main Distributing Frame
- 224. Used Test Set (TS-26/TSM or TS-27/TSM) to detect line faults
- 225. Installed Running Boards or Transposition Brackets
- 226. Dead-ended wire or cable

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- 227. Constructed Tension Bridges
- 228. Fastened cable to Suspension Strand or Support Wire
- 229. Used Chain Hoist, Block and Tackle, or Wire Pulling Block
- 230. Additional Tasks. In the space provided on the back of the answer sheet, list any additional tasks you performed on your job when in the field. For example, if you operated the Manual Teletype, say so, and indicate about how often you used it.

# FIELD WIREMAN TASK PERFORMANCE INVENTORY

(Answer Sheet)

1.	Name:	
	Name: (Last) (Fi	rst)
2.	Service Number:	3 Grade:
4.	Age: 5. Years o	f Schooling Completed:
6.	Present primary MOS:	
7.	Your branch of service: Infantry_	; Artillery;
	Armor	; Other (Specify)
8.	Total number of months of Army ser	vice:
9.	If you attended a Field Wireman Co Course? (Month) (Year)	urse, when did you complete that
10.	If you did not attend a Field Wire	man Course, check here
11.	Present Duty Position (Radio Opera Operator, etc.):	tor, Telephone
12.		osition:
13.		ns in MOS 36K20 that you have filled ce you graduated from a Field Wireman
	Duty Position	How long? (Months)
	(a) Radio Operator	
	(b) Telephone Operator	
	(c) Switchboard Operator	
	(d) Wireman	
	(e) Messenger	
	(f) Routing Clerk	
	(g) Clearance and Files Clerk	
	(h) Incoming Messages Clerk	
	(i) Outgoing Messages Clerk	

	<b>(j)</b>	List any othe clerk, driver AIT or since	, etc.) t	that you ha	ve filled	since yo	u finis	ompany hed you
		Dut	y Positio	on		Но	w long?	(Month
					•			
14.	What	was your last	Duty Pos	sition <u>in</u> t	he field?			
		Duty Position	•	Location (Viet N Europe,	am,	Ho	w long?	(Month
			<del></del>					
15.	What	was your Unit	in your	last Duty	Position <u>i</u>	in the fi	eld?	
	(Com	pany, Battery,	Troop)	(Battalio	n) (Brig	gade) (	Divisio	n)

Name:		Service	Number	
	(Last) (First)			

## FIELD WIREMAN TASK PURFORMANCE INVENTORY

(Answer Sheet)

We want to know how many duty days during your last 30 duty days in the field you spent doing each of the tasks on the following list. Write the number of duty days you worked on the task in the space provided after each task. For example, if you "installed phantom circuits" on three different days during your last 30 days in the field, write "3" after that task. If during your last 30 duty days in the field you never "operated a SB 22 switchboard, "write "0" after that task. Follow the same procedure for all the tasks that are listed.

Be sure to fill in a number for each task named Raise your hand at any time you have a question

Task	Days	Task	Days	Task	Days	Task	Days	Task	Days	Task	Days	Task	Days	Task	Days
No.	Done		Done		Done		Done		Done	No.	Done	No.	Done	No.	Done
16		45		74		193		132		161		190		219	
17		46		75		104		133		162		191		220	
18		47		76		105		134		163		192		221	
19		48		77		105		1.35		.64		193		222	
20		49		78		107		136		.65		194		223	
21		50		79		108		137		.56		195		224	
22		51		80		109		138		.67		196		225	
23		52		81		110		139		.58		197		226	
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42		71		100		129		158		87		216			
43		72		101		130		159		188		217			
44		73		102	<u> </u>	131		150		89		218			<u></u>

(OVER)

# ADDITIONAL TASKS

Task	Number of Duty Days on Which You Did This Task

#### APPENDIX B

#### SUPERVISOR'S FIELD WIREMAN TASK IMPORTANCE INVENTORY

The purpose of this questionnaire is to get your observations of how often incumbents perform a variety of tasks when they are working in the field as field wiremen. Your ratings will provide research personnel with information on strong and weak portions of training in the Field Wireman Course, which may undergo some revision.

We are asking you to tell us about how many duty days there were in one month on which a field wireman under your supervision performed each of the tasks listed. Think back to your last month as a supervisor in the field and base your answers on the field wireman's performance during the duty days of that month.

We are just as interested in what jobs he did not have to do as we are in those he had to do often. Take your time and give your answers as nearly as possible to the actual number of <u>duty days</u> he did a job. If he did not do a task at all during that month, you will put a zero (Ø) in the space after the task number. If the wireman operated a switchboard SB-22 in about three duty days during that month in the field, you will put the number "3" in the space after the task "Operated the SB-22 to complete required calls."

First, fill in the following information about yourself as the person who filled out this questionnaire:

1.	Name: 2 Grade:	
3.	Present Duty Position:	
4.	Your Primary MOS:	
5.	Total number of months in the service:	
6.	. Total number of months in your present Duty Position:	

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Your last Duty Position in the field:
Location of that Duty Position (Viet Nam; Korea; Germany, etc.)
Field Unit:  (Company, Battery, Troop) (Battalion) (Brigade) (Division)
Total number of months in that Duty Position:
Date of the last full month you served in that Duty Position:
(Month) (Year) to (Month) (Year)
Approximate number of field wiremen under your supervision during
that month:
Are you a graduate of a Field Wireman Course (36K20)? YesN
Have you attended any special course in the communication field?
No
Yes (Specify)
Your branch of service: Infantry; Artillery;
Armor; Other(Specify)

Name:		Service	Number:
	(Last)	(First)	<del></del>

# SUPERVISOR'S FIELD WIREMAN TASK PERFORMANCE INVENTORY (Answer Sheet)

In the space after each task number, place a number from 0 to 30 that tells the closest number of days on which you think a field wireman under your supervision did the task named in the last month while you were working on the job in the field.

For Example: If you were a supervisor in the Message Center, and the task named is "Work in Message Center" and the wireman under your supervision worked in the Message Center for about 12 of the duty days of your last month in the field, you would put the number "12" in the space because he spent 12 duty days working in the Message Center.

Be sure to fill in a number for each task named Remember, we are not asking how often you did the task. We are asking how often a field wireman under your supervision did the task. Raise your hand at any time you have a question.

Task	Days	Task	Days	Task	Days	Task	Days	Task	Days	Task	Days	Task	Days	Task	Days
No.	Done		Done												
16		45		74		103		132		161		190		219	
17		46		75		104		133		162		191		220	
18	ļ	47		76		105		134		163		192		221	
19		48		77		106		135		164		193		222	
20		49		78		107		136		165		194	l l	223	1
21		50		79		108		137		1.66		195		224	
22		51		80		109		138		167		196		225	
23		52		81		110		139		168		197		226	
24		53		82		111		140		169		198		227	
25		54		83		112		141		170		199		228	
26		55		84		113		142		171		200		229	
27		56		85		114		143		172		201			
28		57		86		115		144		173		202			
29		58		87		116		145		174		203			
30		59		88		117		146		175		204			
31		60		89		118		147		176		205			
32		61		90		119		148		177		206			
33		62		91		120		149		178		207			
34		63		92		121		150		179		208			
35		64		93		122		151		180		209			
<u>36</u>		65		94		123		152		187		210			
37		66		95		124		153		182		211			
38		67		96		125		154		183		212			
39		68		97		126		155		184		213			
40		69		98		127		156		185		214			
41		70		99		128		157		186		215			
42		71		100		129		158		187		216			
43		72		101		130		159		188		217			
44	1	73		102		131		160		189	1	218			

# ADDITIONAL TASKS

Task	Number of Duty Days on Which Men Did This Task

## APPENDIX C

# Resume of Job Duties Done at Least Once By More Than 50% of Men in Overseas Areas (N=138)

	· · · · · · · · · · · · · · · · · · ·
Questionnaire Item #1	Item
16	Drove light vehicles (up to 3/4 ton)
17	Performed 1st echelon maintenance on light vehicles
23	Filled-in DA Form 2404 (Equipment Inspection & Maintenance Worksheet) to indicate the serviceability of equipment
45	Used Radio Call Signs & Frequencies from SOI
57	Printed or pronounced letters phonetically (phonetic alphabet)
72	Performed preventive maintenance on wire laying/recovery equipment
74	Performed preventive maintenance on SB-22 switchboard
76	Performed preventive maintenance on TA-312 telephone
91	Used cover and concealment to avoid detection by the enemy
92 <sup>2</sup>	Used your weapon to defend yourself from enemy attack
106	Installed field wire on the surface of the ground
121	Detected the presence & general location of faults in field wire lines using a field telephone (shorts, grounds, crossed, open circuits)

 $<sup>^{1}</sup>$ Refers to items appearing in Appendix A  $^{2}$ Vietnam only

122	Determined the specific location of faults in field wire lines by visual inspection
123	Corrected faults in field wire lines
127	Spliced field wire (WD-1) using wire cutting pliers
128	Made standard splice
137	Checked component parts & prepared SB-22 for operation
138	Connected headset to SB-22
140	Operated the SB-22 to complete required calls
168	Prepared TA-312 telephone for operation
169	Operated TA-312 telephone with batteries
220	Installed telephone (TA-236, TA-312, or TA-43)

Table C-1

Frequency Distribution of Approximate Number of Days on which Wiremen in Overseas Areas Did Job Duties
Listed on Field Wireman Task Performance Inventory (N=138)

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
16*	35	33	24	9	10	6	21
17*	44	27	13	13	13	4	24
18	83	36	7	3	4	1	4
19	112	18	2	2	0	1	3
20	100	21	11	4	0	1	1
21	101	22	10	3	1	0	1
22	84	31	8	4	6	2	3
23*	62	35	7	4	13	4	13
24	125	2	0	0	2	0	9
25**	132	0	2	0	0	0	4
26**	131	2	0	0	1	0	4
27**	128	3	2	0	2	0	3
28	125	6	1	3	0	0	3
29	99	20	8	1	3	3	4
30	122	9	4	0	0	0	3
31	125	8	3	0	0	1	1
32	125	5	4	1	. 2	0	1
33	129	3	1	1	2	0	2

<sup>\*</sup>Job duty done by more than 50%
\*Job duty not done by 90%

Table C-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
34**	128	5	1	1	1	0	2
35**	128	3	4	0	0	0	3
36	117	3	7	2	2	1	6
37	116	7	5	3	1	1	5
38**	131	1	1	2	0	1	2
39**	132	3	. 0	0	o	0	3
40	120	6	5	2	0	1	4
41	123	6	3	1	1	0	4
42**	134	3	0	0	0	o	1
43**	127	3	2	1	o	1	4
44	114	10	2	4	1	1	6
45*	59	25	9	7	4	4	<b>3</b> 0
46**	127	6	1	0	1	o	3
47	125	3	4	1	2	0	3
48	113	17	3	3	0	0	2
49	102	18	6	1	3	0	8
50**	129	4	0	0	1	0	4
51**	130	5	1	0	0	0	2
52	93	20	5	6	1	2	11
53**	134	4	0	0	0	0	0
54	122	9	2	2	0	0	3
		-	-	-	-	=	-

<sup>\*</sup>Job duty done by more than 50%

\*\*Job duty not done by 90%

Table C-1 - continued

Item No.	Never	l-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
55	76	17	10	5	4	3	23
56	112	9	5	1	0	1	10
57*	68	25	7	7	5	1	25
58	80	13	8	6	4	2	25
59	121	4	3	0	1	1	،8
60	108	8	5	3	3	0	11
61	120	4	3	0	0	0	11
62	119	6	4	2	1	0	6
63	115	4	0	. 4	1	1	13
64	116	4	1	4	0	1	12
65	115	3	1	5	1	1	12
66	98	10	6	6	3	2	13
67	86	25	5	8	1	1	12
68	122	5	2	1	2	1	5
69	92	29	5	6	1	0	5
70	83	37	4	5	0	1	8
71	72	47	6	2	0	0	11
72*	56	45	13	5	6	1	12
73	109	13	6	3	1	0	6
74*	61	36	11	6	3	3	18
75	125	7	2	1	0	2	1

<sup>\*</sup>Job duty done by more than 50%

Table C-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
76*	47	40	16	6	7	2	20
77	123	11	2	0	0	0	2
78	84	32	7	3	1	1	10
79	123	5	2	3	0	0	5
80	84	29	4	7	3	1	10
81**	138	0	0	0	0	0	0
82**	134	4	0	0	0	0	0
83**	127	9	2	0	0	0	0
84**	126	8	1	0	1	0	2
85**	129	9	0	0	0	0	0
86	103	28	3	2	1	0	1
87	109	19	4	0	1	0	5
88	109	20	2	2	0	1	4
89	125	8	1	0	0	1	3
90	97	23	6	3	2	1	6
91*	65	27	9	9	6	1	21
92*	65	42	7	6	4	1	13
93	79	29	16	5	3	0	6
94	123	13	0	1	0	0	1
95	117	14	2	2	0	2	1
96	71	35	15	6	6	0	5

<sup>\*</sup>Job duty done by more than 50%

\*\*Job duty not done by 90%

Table C-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
97	101	18	8	3	4	0	4
98	75	24	2	5	5	1	26
99	123	12	2	0	0	0	1
100	122	9	2	0	0	0	5
101	83	38	10	3	0	0	4
102	120	14	1	1	0	0	2
103	123	11	2	1	0	0	1
104	74	35	10	5	5	4	5
105	120	15	3	0	0	0	0
106*	54	47	14	3	8	1	11
107	103	20	7	1	1	1	5
108	112	18	3	2	1	0	2
109	86	35	8	2	3	0	4
110	76	40	13	2	1	2	4
111	103	21	S	2	2	1	4
112**	127	9	0	0	. 2	0	0
113**	135	2	0	0	0	0	1
114	111	20	4	1	0	0	2
115	97	29	2	4	2	0	4
116	99	25	6	2	2	0	4
117	82	30	12	3	3	1	7

<sup>\*</sup>Job duty done by more than 50%

\*Job duty not done by 90%

Table C-1 - continued

Item No.	Ņever	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
118	118	13	3	1	1	0	2
119	124	9	2	1	0	0	2
120**	127	5	. 1	1	1	1	2
121*	63	35	18	5	7	1	9
122*	66	40	17	2	3	1	9
123*	54	35	15	12	5	3	14
124	79	29	13	5	4	1	7
125	79	23	15	10	3	1	7
126	115	16	4	1	1	U	1
127*	56	31	19	8	4	6	14
128*	58	31	16	12	1	4	16
129	81	41	9	0	3	0	4
130	94	28	9	1	2	0	4
131	92	33	5	2	1	0	5
132	102	26	1	1	3	0	5
133	86	31	11	0	4	1	5
134	90	30	11	2	2	0	3
135	93	23	15	3	1	0	3
136	120	13	3	0	1	0	1
137*	68	48	6	5	0	0	11
138*	64	46	9	7	4	0	8
139	81	42	5	2	3	0	5

<sup>\*</sup>Job duty done by more than 50%

<sup>\*\*</sup>Job duty not done by 90%

Table C-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
140*	57	40	7	9	5	2	18
141	75	49	4	4	4	0	2
142	89	36	7	3	1	0	2
143	119	13	2	2	1	O	1
144	116	14	5	0	0	0	3
145**	135	1	1	0	0	0	1
146	117	5	7	2	1	1	5
147	123	9	2	2	0	0	2
148	124	11	3	0	0	0	0
149**	132	6	<b>0</b> .	0	0	0	. 0
150**	133	5	0	0	0	0	٥
151**	136	2	0	0	0	0	0
152**	126	8	3	0	0	0	1
153	122	9	3	1	1	0	2
154	120	11	2	0	1	2	2
155	121	10	5	0	0	0	2
156	90	30	9	0	0	3	6
157	79	33	9	3	3	3	8
158	70	33	13	3	1	5	13
159**	131	5	2	0 .	0	0	0
160	73	32	10	3	2	3	15

<sup>\*</sup>Job duty done by more than 50%

\*\*Job duty not done by 90%

Table C-1 - continued

·Item No.	Never '	l-5 Days	6-10 · Days	ll-15 Days	16-20 Days	21-25 Days	26-30 Days
161	97	27	5	2	1	2	4
162	81	38	9	2	3	1	4
163	83	32	8	4	3	2	6
164	100	30	3	0	0	0	5
165**	132	5	0	0	0	0	1
166**	134	2	1	0	0	0	1
167**	133	3	0	1	0	0	1
168*	46	37	15	15	7	5	13
169*	37	30	16	9	12	9	25
170	100	26	7	1	0	1	3
171	80	36	8	6	1	1	. 6
172	93	36	5	1	0	1	2
173	118	10	6	0	0	0	4
174	99	32	4	1	1	0	1
175	102	21	4	2	1	1	7
176**	135	2	0	1	0	0	0
177**	132	1	0	1	0	0	4
178**	134	1	1	0	0	0	2
179**	126	3	6	1	0	0	2
180	122	5	2	2	0	0	7
181	98	26	5	1	1	0	7

<sup>\*</sup>Job duty done by more than 50%

<sup>\*\*</sup>Job duty not done by 90%

Table C-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
182	123	8	4	1	1	0	1
183**	131	4	3	0	0	0	0
184**	136	1	1	0	0	0	0
185	116	19	1	0	0	0	2
186**	134	1	2	0	0	0	1
187	124	12	1	0	0	0	1
188**	135	3	0	0	0	0	0
189	124	10	2	0	0	0	2
190**	126	10	2	0	0	0	0
191**	136	1	1	0	0	0	. 0
192**	135	2	1	0	0	0	0
193**	132	6	0	0	0	0	0
194**	130	6	0	1	1	0	0
195	86	27	11	6	3	1	4
196**	134	1	1	0	1	0	1
197**	136	0	1	1	. 0	0	0
198	122	10	3	2	1	0	0
199	125	8	4	0	1	0	0
200	79	42	9	2	. 2	0	4
201	122	10	2	1	1	0	2
202**	133	3	1	0	0	0	1

Job duty not done by 90%

Table C-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
203**	133	5	0	0	0	0	0
204	123	14	0	0	0	0	1
205	124	13	0	1	0	0	0
206**	127	9	1	0	0	0	1
207**	135	3	0	0	0	0	0
208**	134	3	0	1	0	0	0
209	121	15	1	0	0	0	1
210	122	15	0	0	0	0	1
211**	132	5	0	0	1	0	0
212**	138	0	0	0	0	0	0
213**	138	0	0	0	0	0	0
214**	136	1	1	0	0	0	0
215**	127	8	3	0	0	0	0
216	124	11	2	1	0	0	0
217	118	14	4	0	0	0	2
218	110	27	1	0	0	0	0
219**	126	9	2	1	O	0	0
220*	67	38	15	4	S	1	8
221**	127	7	3	0	0	0	1
222**	135	2	0	Ó	1	0	0
223**	136	2	0	0	0	0	0

<sup>\*</sup>Job duty done by more than 50%

Job duty not done by 90%

Table C-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
224**	132	4	1	0	0	0	1
225**	138	0	0	0	0	0	0
226**	126	6	3	0	1	1	1
227**	134	3	1	0	0	0	0
228**	133	4	1	0	0	0	0
229**	130	5	1	0	0	1	1

Job duty not done by 90%

## Resume of Job Duties Never Done by 90% of Men in Oyerseas Areas (N=138)

Questionnaire Item #1	<u>Item</u>
25	Made entries on DA Form 11-37 (Distribution Center Delivery List)
26	Prepared DA Form 11-63 (Route Delivery List)
27	Made entries on DA Form 173 (Joint Message Form)
33	Filled-in DA Form 11-170 (Message Form)
34	Used Air Messenger Schedule from SOI
35	Used Motor Messenger Schedule from SOI
38	Used TT, RATT & RATG Authentication System from SOI
39	Used Maplay Crypotsystem from SOI
42	Used Friendly Nuclear Strike Warning System from SOI
43	Used Message Reference Number System from SOI
46	Used Teletypewriter Call Signs from SOI
50	Used Sound Signals from SOI
51	Used Panel Code from SOI
53	Used Emergency Ground/Air Code and Panel Code from SOI
81	Administered first aid for electrical shock
82	Administered first aid for broken bones
83	Administered first aid for burns
84 ·	Administered first aid for splinters

 $<sup>^{1}</sup>$ Refers to items appearing in Appendix A

85	Administered first aid for unconsciousness
112	Installed field wire below the surface of streams and rivers
113	Installed field wire under railroad tracks by passing wire between ties
120	Installed simplex-phantom circuits
145	Connected SB-86 for teletypewriter service
149	Checked component parts & prepared SB-993 for operation
150	Operated SB-993 to complete required calls
151	Broke down SB-993 for movement or storage
152	Assembled components of AN PRC/10 radio
159	Installed re-transmission cable MK-126
165	Prepared TA-264 telephone for operation
166	Operated TA-264 telephone
167	Broke down TA-264 telephone
176	Installed & Operated switchboard MTC-7
177	Used cryptographic equipment to encode & decode messages
178	Prepared messages for transmission on manual teletype
179	Extracted, duplicated, & distributed pertinent sections of SOI & SSI to subordinate units
183	Cleared "right of way" (path) for pole line
184	Operated V-18/MTS to dig holes for poles
186	Operated V-17/MTQ to set poles in holes
188	Used a Guy Rule to determine size of guy
190	Installed Cross-arms on poles
191	Used Pull Finder and Steel Tape to measure pull on poles and angles

192	Loaded or unloaded poles from V-120/GT or V-13/GT Trailer
193	Loaded or unloaded reels of cable from V-120/GT Trailer or V-13/GT Trailer
194	Used a lineman's hand signals
196	Made a "crown splice" or "eye splice" in rope
197	Installed Transposition Brackets
202	Installed Telephone Repeater AN/TCC-11 on pole
203	Used Test Set TS/712/TCC-11 to check out Telephone Repeater
206	Installed Distribution Box J-1077A/U on pole
207	Used Cable Plow LC-236 to adjust tension on cable
208	Installed Cable Tension Bridge on cable .
211	Installed suspension strands on poles to support cable
212	Installed plastic sheathed cable (Fig. 8, Alpeth, Stalpeth, or PICA) on poles or cross-arms
213	Installed lead sheathed cable on poles or cross-arms
214	Operated Cable Lashing Machine
215	Installed cable terminal on pole
219	Installed connector blocks for telephone
221	Installed auxiliary telephone equipment (key equipment, buzzers, etc.)
222	Installed & Operated Communication Patching Panel SB-611/MRC or SB-675/MRC
223	Operated Main Distributing Frame
224	Used Test Set (TS-26/TSM or TS-27/TSM) to detect line faults
225	Installed Running Boards or Transposition Brackets-

220	pead-ended wire or cable
227	Constructed Tension Bridges
228	Fastened cable to Suspension Strand or Support Wire
229	Used Chain Hoist, Block and Tackle, or Wire

APPENDIX D
Table D-1

Frequency Distribution of Approximate Number of Days on which Supervisors in Overseas Areas Stated that Field Wiremen Under their Supervision Did Job Duties Listed on Field Wireman Task Performance Inventory (N=38)

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
16*	5	1	1	8	4	2	17
17*	8	4	3	4	2	2	15
18	19	9	3	4	1	0	2
19	28	7	3	0	0	0	0
20	22	7	6	1	1	0	1
21	21	6	4	2	2	1	2
22	21	11	2	1	0	1	2
23*	11	9	1	0	4	0	13
24	28	4	3	0	0	0	3
25**	31	1	1	0	1	0	4
26**	35	2	0	0	0	0	1
27**	31	4	2	0	1	0	0
28	3,4	2	1	0	0	0	1
29	23	10	1	0	2	0	2
30	29	5	0	1	1	0	2
31	30	4	1	0	0	1	2
32	26	7	3	0	0	0	2
33**	29	1	1	2	1	0	4
34**	34	3	0	0	0	0	1

<sup>\*</sup>Job duty done by more than 50%
\*\*Job duty not done by 90%

Table D-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
35**	33	3	0	1	1	0	0
36	23	8	1	1	o	0	5
37	26	3	2	0	0	0	7
38**	33	3	0	1	0	0	1
39**	35	2	1	0	0	0	0
40	30	1	. 0	1	1	0	5
41	30	1	2	1	2	0	2
42**	36	1	0	0	1	0	0
43**	30	3	2	1	1	0	1
44	26	5	1	1	1	0	4
45*	7	11	3	2	1	1	13
46**	34	2	0	1	o	0	1
47	25	5	0	0	1	0	7
48	25	4 .	2	0	3	0	. 4
49	17	5	5	0	2	1	8
50**	34	2	0	1	0	0	1
51**	28	5	0	1	0	0	4
52	24	6	1	0	1	0	6
53**	33	3	o	0	0	0	2
54	30	2	2	1	1	0	2
55	13	4	2	1	2	0	16

<sup>\*</sup>Job duty done by more than 50%

Job duty not done by 90%

Table D-1 - continued

56       22       2       5       0       1       0         57*       13       5       4       1       1       0         58       16       5       1       1       1       0         59       22       6       3       2       0       0         60       20       4       3       0       1       0         61       26       1       3       1       2       0         62       24       3       1       1       3       0         63       24       2       2       0       2       1         64       25       3       2       1       2       0         65       23       3       2       2       1       0         66       17       4       4       3       0       0         67       16       7       1       2       1       1         68       28       3       1       0       0       0         69       13       11       1       1       3       1         70       10       10 <td< th=""><th>tem O.</th><th>Never</th><th>1-5 Days</th><th>6-10 Days</th><th>11-15 Days</th><th>16-20 Days</th><th>21-25 Days</th><th>26-30 Days</th></td<>	tem O.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
58       16       5       1       1       1       0         59       22       6       3       2       0       0         60       20       4       3       0       1       0         61       26       1       3       1       2       0         62       24       3       1       1       3       0         63       24       2       2       0       2       1         64       25       3       2       1       2       0         65       23       3       2       2       1       0         66       17       4       4       3       0       0         67       16       7       1       2       1       1         68       28       3       1       0       0       0         69       13       11       1       3       1         70       10       10       3       0       3       0         71       17       9       2       1       3       1         72**       7       9       5 <td< td=""><td>56</td><td>22</td><td>2</td><td><b>5</b> .</td><td>0</td><td>1</td><td>0</td><td>8</td></td<>	56	22	2	<b>5</b> .	0	1	0	8
59       22       6       3       2       0       0         60       20       4       3       0       1       0         61       26       1       3       1       2       0         62       24       3       1       1       3       0         63       24       2       2       0       2       1         64       25       3       2       1       2       0         65       23       3       2       2       1       0         66       17       4       4       3       0       0         67       16       7       1       2       1       1         68       28       3       1       0       0       0         69       13       11       1       1       3       1         70       10       10       3       0       3       0         71       17       9       2       1       3       1         72*       7       9       5       2       5       2         73       28       2	57*	13	5	4	1	1	0	14
60       20       4       3       0       1       0         61       26       1       3       1       2       0         62       24       3       1       1       3       0         63       24       2       2       0       2       1         64       25       3       2       1       2       0         65       23       3       2       2       1       0         66       17       4       4       3       0       0         67       16       7       1       2       1       1         68       28       3       1       0       0       0         69       13       11       1       1       3       1         70       10       10       3       0       3       0         71       17       9       2       1       3       1         72*       7       9       5       2       5       2         73       28       2       1       0       2       0         74*       9       8	58	16	5	1	1	1	0	14
61       26       1       3       1       2       0         62       24       3       1       1       3       0         63       24       2       2       0       2       1         64       25       3       2       1       2       0         65       23       3       2       2       1       0         66       17       4       4       3       0       0         67       16       7       1       2       1       1         68       28       3       1       0       0       0         69       13       11       1       1       3       1         70       10       10       3       0       3       0         71       17       9       2       1       3       1         72*       7       9       5       2       5       2         73       28       2       1       0       2       0         74*       9       8       1       0       3       0	59	22	6	3	2	0	0	5
62       24       3       1       1       3       0         63       24       2       2       0       2       1         64       25       3       2       1       2       0         65       23       3       2       2       1       0         66       17       4       4       3       0       0         67       16       7       1       2       1       1         68       28       3       1       0       0       0         69       13       11       1       1       3       1         70       10       10       3       0       3       0         71       17       9       2       1       3       1         72*       7       9       5       2       5       2         73       28       2       1       0       2       0         74*       9       8       1       0       3       0	60	20	4	3	0	1	0	10
63       24       2       2       0       2       1         64       25       3       2       1       2       0         65       23       3       2       2       1       0         66       17       4       4       3       0       0         67       16       7       1       2       1       1         68       28       3       1       0       0       0         69       13       11       1       1       3       1         70       10       10       3       0       3       0         71       17       9       2       1       3       1         72*       7       9       5       2       5       2         73       28       2       1       0       2       0         74*       9       8       1       0       3       0	61	26	1	3	1	2	0	5
64       25       3       2       1       2       0         65       23       3       2       2       1       0         66       17       4       4       3       0       0         67       16       7       1       2       1       1         68       28       3       1       0       0       0         69       13       11       1       1       3       1         70       10       10       3       0       3       0         71       17       9       2       1       3       1         72*       7       9       5       2       5       2         73       28       2       1       0       2       0         74*       9       8       1       0       3       0	62	24	3	1	1	3	0	6
65       23       3       2       2       1       0         66       17       4       4       3       0       0         67       16       7       1       2       1       1         68       28       3       1       0       0       0         69       13       11       1       1       3       1         70       10       10       3       0       3       0         71       17       9       2       1       3       1         72*       7       9       5       2       5       2         73       28       2       1       0       2       0         74*       9       8       1       0       3       0	63	24	2	2	0	2	1	· <b>7</b>
66       17       4       4       3       0       0         67       16       7       1       2       1       1         68       28       3       1       0       0       0         69       13       11       1       1       3       1         70       10       10       3       0       3       0         71       17       9       2       1       3       1         72*       7       9       5       2       5       2         73       28       2       1       0       2       0         74*       9       8       1       0       3       0	64	25	3	2	1	2	0	5
67       16       7       1       2       1       1         68       28       3       1       0       0       0         69       13       11       1       1       3       1         70       10       10       3       0       3       0         71       17       9       2       1       3       1         72*       7       9       5       2       5       2         73       28       2       1       0       2       0         74*       9       8       1       0       3       0	65	23	3	2	2	. 1	0	7
68       28       3       1       0       0       0         69       13       11       1       1       3       1         70       10       10       3       0       3       0         71       17       9       2       1       3       1         72*       7       9       5       2       5       2         73       28       2       1       0       2       0         74*       9       8       1       0       3       0	66	17	4	4	3	0	0	10
69       13       11       1       1       3       1         70       10       10       3       0       3       0         71       17       9       2       1       3       1         72*       7       9       5       2       5       2         73       28       2       1       0       2       0         74*       9       8       1       0       3       0	67	16	7	1	2	1	1	10
70       10       10       3       0       3       0         71       17       9       2       1       3       1         72*       7       9       5       2       5       2         73       28       2       1       0       2       0         74*       9       8       1       0       3       0	68	28	3	1	0	0	0	6
71     17     9     2     1     3     1       72*     7     9     5     2     5     2       73     28     2     1     0     2     0       74*     9     8     1     0     3     0	69	13	11	1	1	3	1	8
72*     7     9     5     2     5     2       73     28     2     1     0     2     0       74*     9     8     1     0     3     0	70	10	10	3	0	3	0	12
73     28     2     1     0     2     0       74*     9     8     1     0     3     0	71	17	9	2	1	3	1	5
74* 9 8 1 0 3 0	72*	7	9	5	2	5	2	8
	73	28	2	1	0	2	0	5
75 32 3 2 0 0 0	74*	9	8	1	0	3	0	17
	75	32	3	2	O	0	o	1
76* 3 5 7 1 2 0	76*	3	5	7	,1	2	0	20

<sup>\*</sup>Job duty done by more than 50%

Table D-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
77	33	2	1	0	1	0	1
78	17	5	1	2	2	0	11
79	33	2	0	0	0	0	3
80	16	6	6	2	1	0	7
81**	35	2	1	0	0	0	0
82**	33	4	1	0	0	0	0
. 83**	30	<b>5</b>	2	1	0	0	. 0
84**	27	6	5	0	0	0	0
85**	34	3	1	0	0	0	0
86	24	8	3	<b>0</b> .	2	0	1
87	25	3	3	Ó	2	1	4
88	22	6	4	0	2	0	4
89	31	3	1	0	2 .	0	1
90	18	,6	6	2	3	0	3
91*	17	6	6	3	2	0	4
92*	18	7	3	3	2	0	5
93	10	10	6	3	3	0	6
94	23	6	1	0	5	0	3
95	22	· 7	1	o	3	1	4
96	11	7	5	2	2	2	9
97	15	5	4	3	5	1	5
98	17	5	1	0	1	0	14

Job duty done by more than 50%
Job duty not done by 90%

Table D-1 - continued

ltem No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
99	24	4	4	0	2	1	3
100	26	3	4	0	3	0	2
101	11	8	. 10	3	2	0	4
102	31	3	• 1	0	3	0	0
103	26	4	4	. 1	2	0	1
104	12	6	3	2	5	2	8
105	26	9	1	1	0	0	1
106*	5	8	5	6	3	0	11
107	22	9	2	1	2	0	2
108	17	13	3	3	2	0	0
109	17	8 ·	6	0	2	2	3
110	10	13	5	4	2	1	3
111	21	8	2	3	o	2	2
112**	32	2	2	1	1	0	0
113**	34	3	1	0	0	0	0
114	25	9	2	1	1	0	0
115	18	8	5	1	5	0	1
116	19	9	3	1	4	0	2
117	16	10	2	2	5	0	3
118	21	10	2	2	0	0	3
119	30	5	1	0	0	0	2

Job duty done by more than 50% Job duty not done by 90%

Table D-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
120**	34	1	1	v	0	0	2
121*	5	6	4	7	5	1	10
122*	7	5	11	6	4	1	4
123*	6	3	4,	7	5	2	11
124	7	11	7	2	4	1	6
125	11	6	8	4	4	0	5
126	27	4	1	2	1	0	3
127*	6	4	4	7	5	2	10
128*	6	4	3	8	<b>4</b>	3	10
129	11	16	8	2	1	o	0
130	14	11	7	2	1	o	3
131	14	15	3	3	1	o	2
132	21	9	4	1	0	0	3
133	18	10	4	4	1	o	1
134	12	12	3	2	4	1	4
135	12	5	6	3	3	1	8
136	28	3	3	2	2	0	0
137*	9	16	3	0	1	1	8
138*	7	14	5	1	1	1	9
139	14	16	3	1	0	0	4
140*	12	6	2	1	2	1	14

Job duty done by more than 50% Job duty not done by 90%.

Table D-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
141	16	, 8	5	1	3	0	5
142	19	15	3	0	1	0	0
143	33	3	0	1	0	9	1
144	. 33	2	0	0	1	0	2
145**	37	1	0	0	0	٥	0
146	31	<b>2</b> .	. 0	1	1	0	<b>3</b> 1
147	32	3	2	0	0	1	0
148	33	3	2	0	0 .	0	0
149**	33	3	1	9	. 1	0	0
150**	35	ı	1	0	1	0	0
151**	33	<b>3</b> .	1	0	1	0	0
152**	36	2	0	0	0	0	0
153	33	3	1	0	. 0	1	0
154	32	.3	1	0	1	1	.0 <del>.</del>
155	34	3	1	0	0	0	0
156	17	11	4	0	0	0	6
157	15	10	3	2 .	1	0	7
158	15	8	3	2	1	0	9
159**	34	3	1	0	0 .	0	0
160	14	8	4	0	2	0	10
161	22	8	4	0	0	0	4
162	16	. 7	2	4	1	1	7

Tob duty not done by 90%

Table D-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
163	15	4	1	4	2	2	10
164	24	8	0	. 1	1	0	4
165**	34	3	0	0	0	0	. 1
166**	34	2	1	0	0	0	1
167**	35	2	0	0	0	o	1
168*	2	9	7	4	4	1	11
169*	4	4	4	1	2	1	22
170	20	13	1	2	0	0	2
171	15	12	4	0	2	1	4
172	16	15	4	1	0	1	1
173	28	1	2	2	0	o	5
174	18	14	2	0	1	2	1
175	24	7	2	0	0	0	5
176**	36	0	0	0	0	0	2
177**	35	1	0	1	1	0	0
178**	34	1	1	0	1	0	1
179**	28	5	2	1 .	0	1	1
180	25	6	0	3	1	0	3
181	18	8	8	0	1	0	3
182	30	6	1	0	0	0	1
183**	32	3	2	1	0	0	0
184**	37	0	0	1	0	0	0

Job duty done by more than 50%
Job duty not done by 90%

Table D-1 - continued

185	27	7			Days	Days	Days
10/ **		/	2	0	1	1	0
186**	37	0	0	1	0	0	0
187	27	6	2	1	1	1	0
188**	35	3	0	0	0	0	0
189	35	3	0	0	0	0	0
190**	33	4	0	0	1	0	0
191**	32	5	0	0	0	0	1
192**	37	1	0	0	0	0	0
193**	37	0	1	0	0	0	0
194**	32	4	0	O	0	0	2
195	13	5	2	4	2	0	12
196**	36	1	1	0	0	0	0
197**	36	1	1	0	0	0	0
198	27	10	0	0	0	0	1
199	31	3	2	0	0	1	1
200	16	9	3	2	1	2	5
201	29	6	3	0	0	0	0
202**	38	0	0	0	0	0	0
203**	36	1	1	0	. 0	0	0
204	29	8	1	0	0	0	0
205	31	4	1	0	1	0	1

<sup>&</sup>quot;Job duty not done by 90%

Table D-1 - continued

Item No.	Never	l-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
206**	34	4	0	0	0	0	0
207**	36	2	0	0	0	0	0
208**	35	1	1	1	0	0	0
209	25	8	2	2	1	0	0
210	32	3	2	0	1	0	0
211**	31	3	4	0	0	0	0
212**	38	0	0	0	0	0	0
213**	38	0	0	0	0	0	0
214**	36	1	1	0	0	0	0
215**	32	2	4	0	0	0	0
216	31	6	. 0	1	0	0	0
217	27	6	2	0	1	0	2
218	23	9	4	0	1	0	1
219**	29	4	4	0	1	0	0
220*	9	7	9	4	3	0	6
221**	28	6	3	0	0	0	1
222**	38	0	0	0	0	0	0
223**	35	2	1	0	0	0	0
224**	36	2	0	0	0	0	0
225**	37	1	0	0	0	0	0
226**	34	4	0	0	0	0	0

Job duty done by more than 50%
Job duty not done by 90%

Table D-1 - continued

Item No.	Never	1-5 Days	6-10 Days	11-15 Days	16-20 Days	21-25 Days	26-30 Days
227**	37	0	1	0	0	0	0
228**	34	4	0	0	0	0	0
229**	34	3	1	0	0	0	0

<sup>\*\*</sup>Job duty not done by 90%

## APPENDIX E

Table E-1
Summary of Additional Job Duties Reported
Done by Men in Overseas Areas

Job Duty Reported	No. of Men Did	Theater of Operation	No. of Days Each Man Die
Operated AN/VRC 46	3	Vietnam	30
•	1	11	28
	2	***	25
	. 1	11	20
	1	11	15
	2	11	10
	1	11	5
	1	11	3
	1	Europe	3
Operated AN/VRC 47	1	Vietnam	30
	1	11	25
	1	11	20
	2	11	10
Operated AN/VRC 442	1	Vietnam	25
Operated AN/GRC 106	2	Vietnam	30
•	1	<b>′ 11</b>	10
Operated AN/PRC 25	1	Vietnam	10
Installed VRC 524	1	Vietnam	10
Operated AN/VRC 49	1	Vietnam	30
•	1	f1	20
	1	11	15
Operated AN/GRR 5	1	Europe	4
Operated AN/PRC 77	1	Vietnam	3
Operated AN/VRC 1	1	Vietnam	3
Operated AN/PRC 6	1	Korea	5
Installed 292 antenna	1	Vietnam	2
Installed WD-1 underground	1	Vietnam	10
Operated AN/PDR 276	1	Europe	6

Table E-1 - continued

Job Duty Reported	No. of Men Uid	Theater of Operation	No. of Day Each Man I.d
Operated IM-174/PD and IM-147-93	2	Europe	6
Operated AN/GCC-3 teletype	1	Europe	2
Operated KW-7 and KL-7	1	Korea	30
Operated SB/289	1	Korea	20
Installed 26-pair cable underground	1	Vietnam	10
Troubleshoot 26-pair cable	1	Vietnam	30
Installed and maintained electrical lines	1 1 1	Vietnam "	30 12 1
Guard duty	1	Vietnam "	30 2
Map reading and land navigation	1	Vietnam "	30 5
Artillery	2 1	Vietnam	30
Infantry	1 1	Vietnam "	30 5
Military Police	1	Vietnam	30
Planned and built Communications Center	1	Vietnam	2
Served in Message Center	2	Vietnam	30
Repaired radios	1 1 1	Vietnam Korea	30 30 5
Installed radios	1	Korea Vietnam	30
Installed civilian telephones	1	Vietnam "	15 2
Repaired generators	1	Vietnam	2 - 1
Drove vehicles up to 2-1/2 ton	1	Europe	20